We claim:

1. An acetic acid salt of a compound of formula (3) or (7):

- 2. The acetic acid salt according to claim 1, wherein said salt is in solid form.
- 3. The acetic acid salt according to claim 1, wherein said salt is the salt of said compound of formula (3).
- 4. The acetic acid salt according to claim 3, wherein said salt contains more of the Z-isomer of formula (3) than of the E-isomer of formula (3).
- 5. The acetic acid salt according to claim 4, wherein said salt is in solid form and is at least 90% isomerically pure Z-isomer of formula (3).
- 6. The acetic acid salt according to claim 1, wherein said salt is the salt of said compound of formula (7).
- 7. The acetic acid salt according to claim 6, wherein said salt contains more of the Z-isomer of formula (7) than of the E-isomer of formula (7).
- 8. The acetic acid salt according to claim 7, wherein said salt is in solid form and is at least 90% isomerically pure of Z-isomer of formula (7).

9. An enriched Z-isomer oxime of formula (3) or (7):

or a salt thereof, wherein the amount of Z-isomer is at least 80%, based on the total amount said oxime.

- 10. The enriched Z-isomer according to claim 9, wherein said oxime contains at least 90% of said Z-isomer.
- 11. The enriched Z-isomer according to claim 10, wherein said oxime contains at least 95% of said Z-isomer.
- 12. The enriched Z-isomer according to claim 10, wherein said oxime is a compound of formula (3).
- 13. The enriched Z-isomer according to claim 10, wherein said oxime is a compound of formula (7).
- 14. A process, which comprises reacting acetic acid with a compound of formula (3) or (7):

$$HN \longrightarrow N \qquad F \qquad (3)$$

$$\begin{array}{c|c}
OH \\
N \\
CH_3
\end{array}$$
(7)

to form the acetic acid salt according to claim 1.

- 15. The process according to claim 14, which further comprises isolating said acetic acid salt in solid form.
- 16. A process, which comprisesproviding an enriched Z-isomer oxime of formula (3) or (7):

$$\begin{array}{c|c}
O \\
N \\
CH_3
\end{array}$$

$$(7)$$

or a salt thereof, wherein said oxime contains at least 80% of said Z-isomer; and converting said enriched Z-isomer oxime into risperidone.

- 17. The process according to claim 16, wherein said enriched Z-isomer oxime contains at least 90% of said Z-isomer.
- 18. The process according to claim 17, wherein said enriched Z-isomer oxime contains at least 98% of said Z-isomer.
- 19. The process according to claim 16, wherein said providing step comprises preferentially precipitating said enriched Z-isomer oxime as an acetic acid salt thereof from a solution containing said oxime in Z- and E-isomer forms and isolating said precipitated enriched Z-isomer oxime.
- 20. The process according to claim 19, wherein said providing step comprises forming said oxime of formula (3) or (7) as a mixture of Z- and E-isomers in the presence of acetic acid and wherein said preferential precipitation occurs substantially spontaneously upon formation of said oxime isomers.
- 21. The process according to claim 16, wherein said providing step comprises heating an oxime of formula (3) or (7) that contains an E-isomer thereof in a solvent to convert a sufficient amount of said E-isomer into Z-isomer to obtain said enriched Z-isomer oxime.
- 22. The process according to claim 21, wherein said heating is carried out in the presence of an acid catalyst.
- 23. The process according to claim 22, wherein said acid catalyst is selected from the group consisting of acetic acid, ammonium acetate, and piperidine acetate.
- 24. The process according to claim 23, which further comprises cooling and precipitating said Z-isomer from said solvent as an acetic acid salt.

- 25. The process according to claim 16, wherein said enriched Z-isomer is the Z-isomer of the oxime of formula (3).
- 26. The process according to claim 25, wherein said converting step comprises alkylating and cyclizing.
- 27. The process according to claim 26, wherein said alkylating comprises reacting said compound of formula (3) with a compound of formula (5)

$$\begin{array}{c|c}
 & CI \\
 & CH_3
\end{array}$$
.HCI (5)

to form a compound of formula (7).

- 28. The process according to claim 27, wherein said cyclizing comprises treating said compound of formula (7) with base to form risperidone.
- 29. The process according to claim 26, wherein said cyclizing comprises treating said compound of formula (3) with base to form a compound of formula (4)

$$HN \longrightarrow F$$
 (4)

30. The process according to claim 29, wherein said alkylating comprises reacting said compound of formula (4) with a compound of formula (5)

$$\begin{array}{c|c}
 & CI \\
 & CH_3
\end{array}$$
.HCI (5)

to form risperidone.

- 31. The process according to claim 16, wherein said enriched Z-isomer is the Z-isomer of an oxime of formula (7).
- 32. The process according to claim 31, wherein said converting step comprises cyclizing said compound of formula (7) to form risperidone.
- 33. A method which comprises reacting in a solvent and in the presence of acetic acid, a compound of formula (2)

7

$$+N \longrightarrow F$$
 (2)

with a hydroxylamine to form Z- and E-isomers of the oxime of formula (3)

$$HN \longrightarrow \begin{matrix} OH \\ N \\ F \end{matrix}$$
 (3)

wherein substantially upon formation of said oxime, Z-isomer precipitates as an acetic acid salt thereof.

- 34. The method according to claim 33, wherein said solvent is a lower alcohol.
- 35. The method according to claim 34, which further comprises converting said precipitated Z-isomer into risperidone.
- 36. A process, which comprises preferentially precipitating an acetic acid salt of a Z-isomer of an oxime of formula (3) or (7)

$$HN \longrightarrow \begin{matrix} OH \\ N \\ F \end{matrix}$$
 (3)

from a solution containing said oxime as a mixture of the Z- and E-isomers thereof.

- 37. The process according to claim 36, wherein said solution is based on a solvent selected from the group consisting of water, a lower alcohol, and combinations thereof.
- 38. The process according to claim 36, wherein said precipitated Z-isomer has an isomeric purity of at least 95%.
- 39. The process according to claim 38, which further comprises converting said precipitated Z-isomer into risperidone.